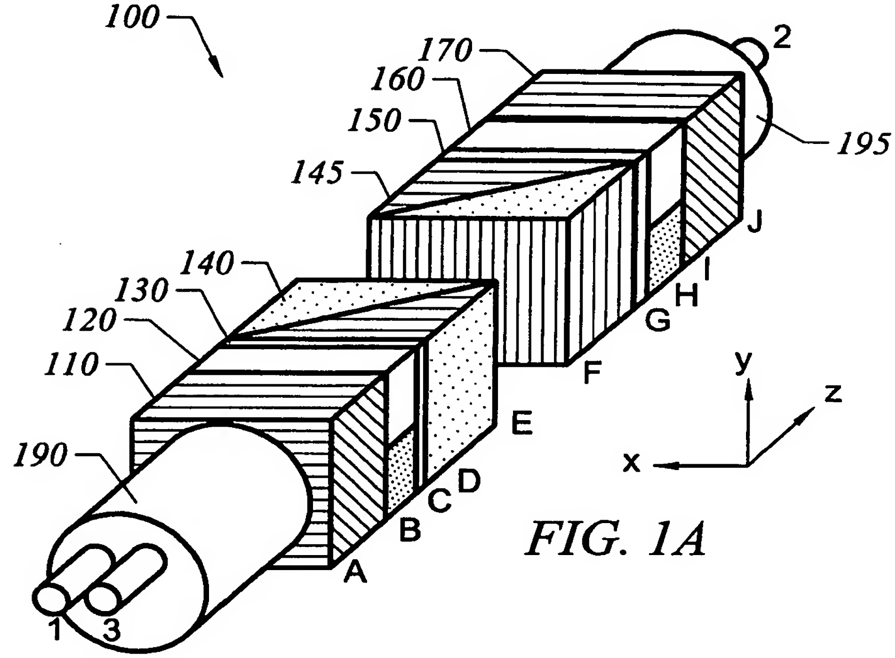


FIG. 1A

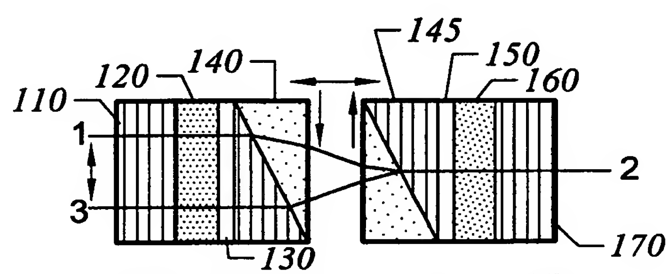


FIG. 1B

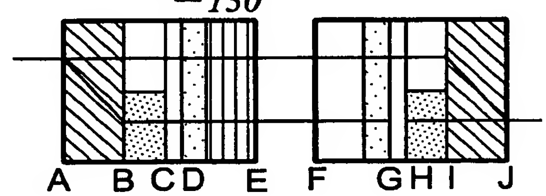


FIG. 1C

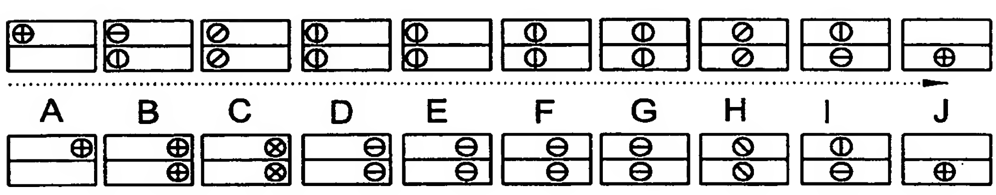
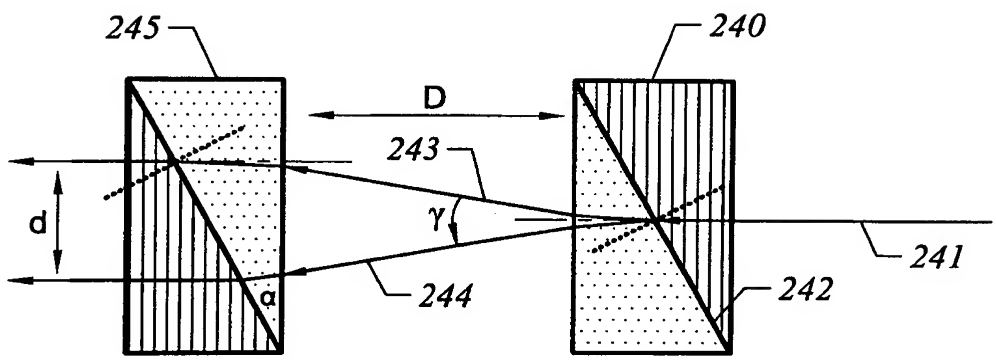


FIG. 1D



$$d \approx 2D \tan(\gamma/2) = 2D \tan\{\arcsin[(n_0 - n_e)\tan(\alpha)]\}$$

Example: $\alpha = 30°$, $\Delta n = 0.2$, D=2mm → d=0.4mm
4mm → 0.8mm

FIG. 2

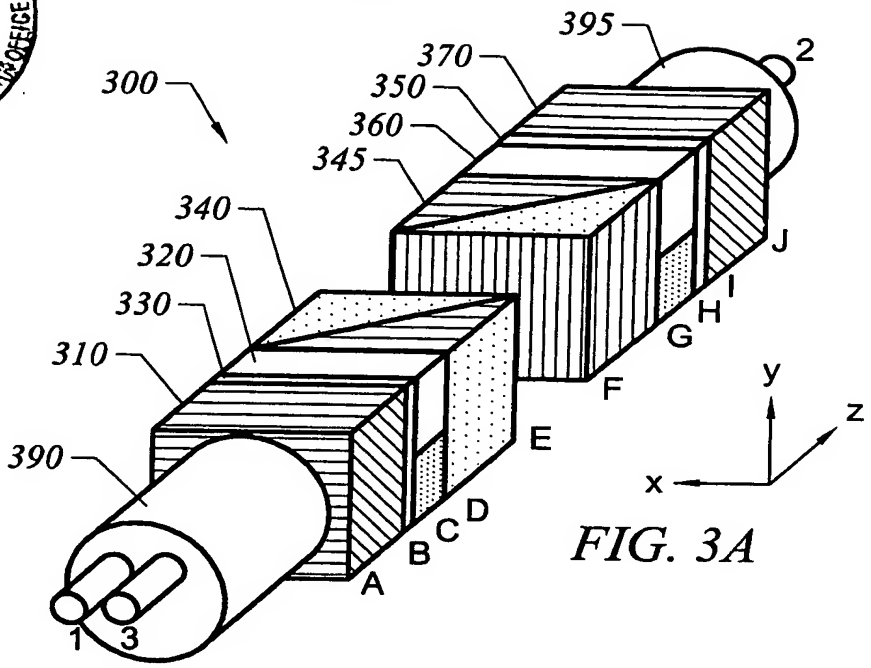


FIG. 3A

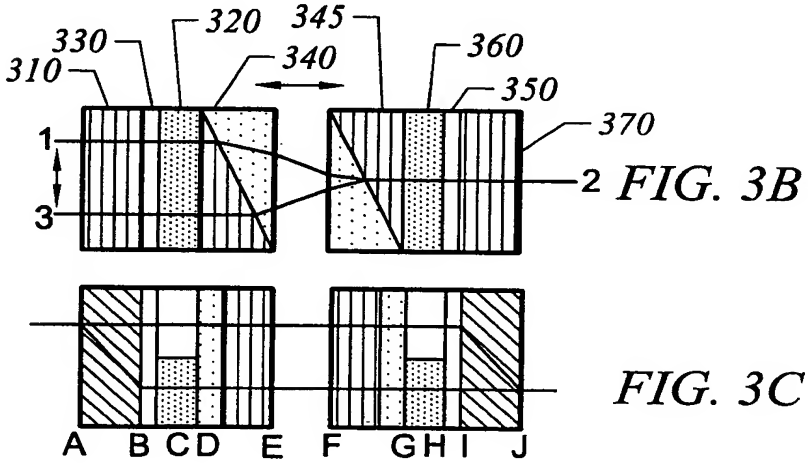


FIG. 3B

FIG. 3C

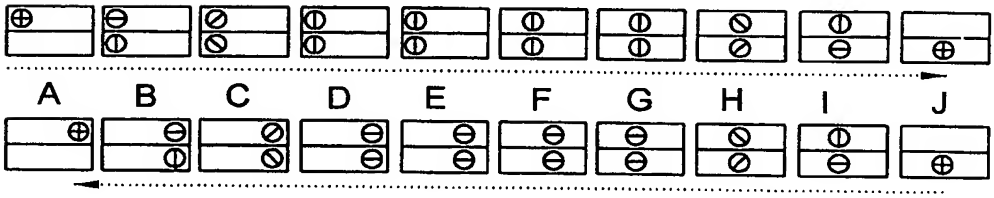


FIG. 3D

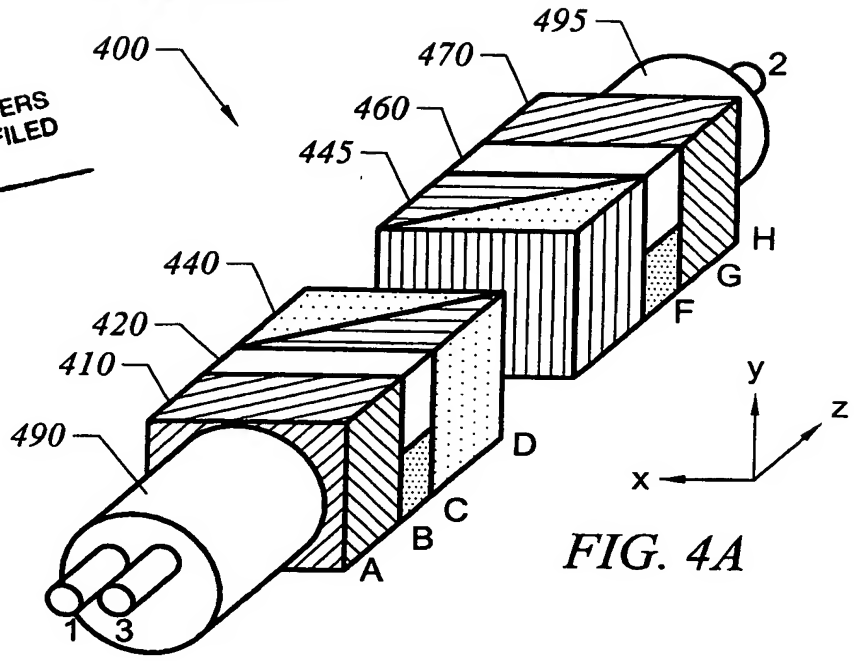


FIG. 4A

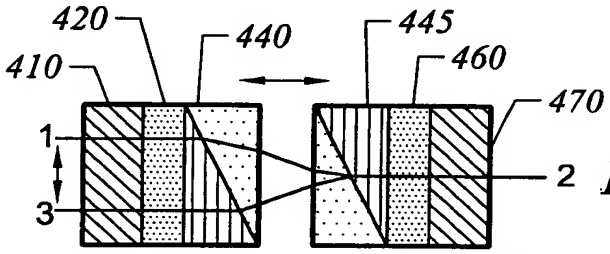


FIG. 4B

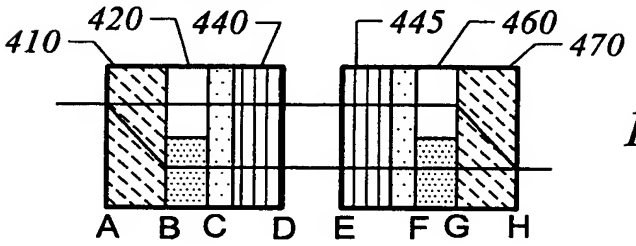


FIG. 4C

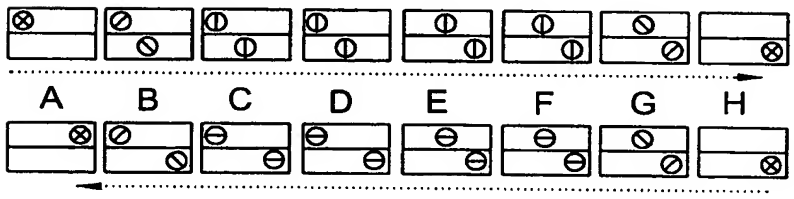


FIG. 4D

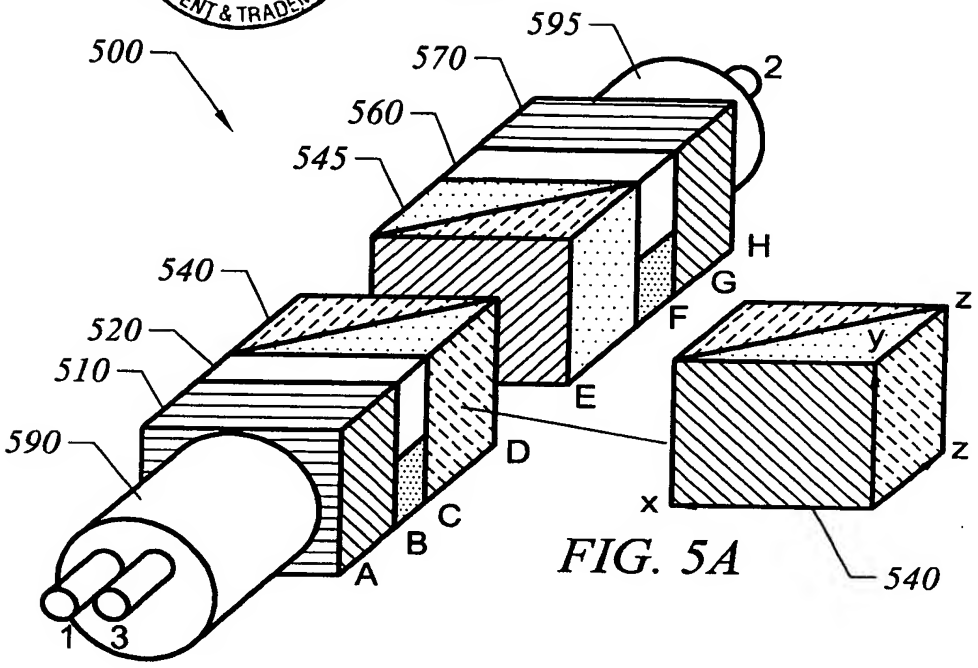


FIG. 5A

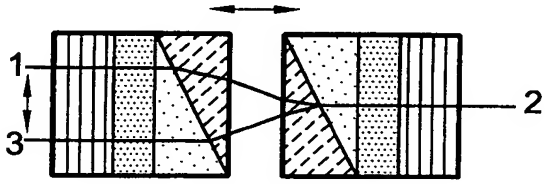


FIG. 5B

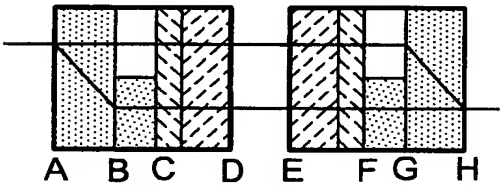


FIG. 5C

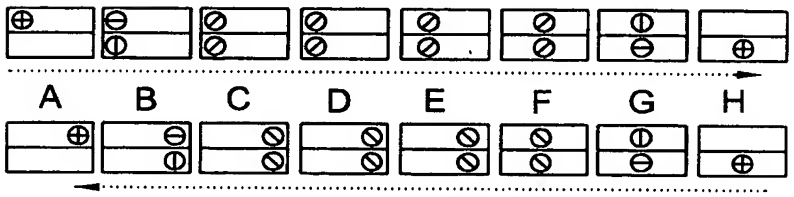


FIG. 5D

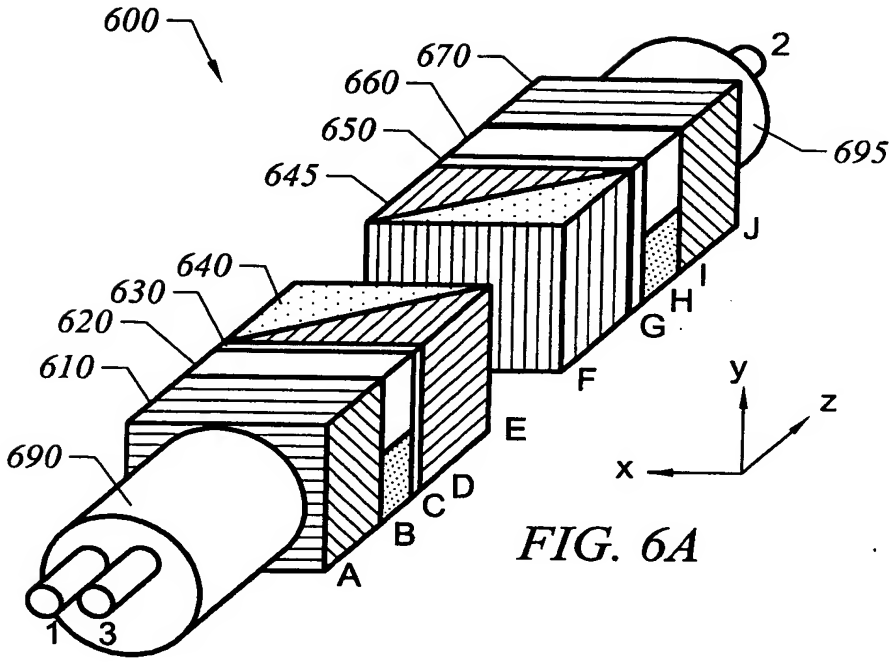


FIG. 6A

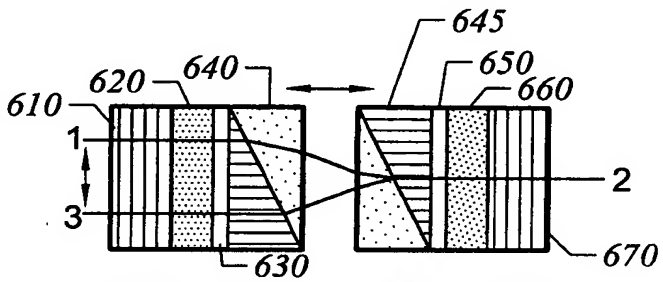


FIG. 6B

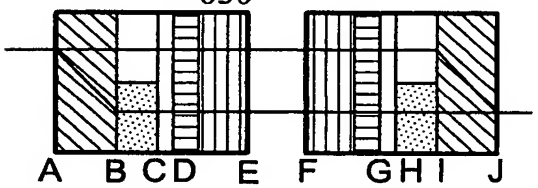


FIG. 6C

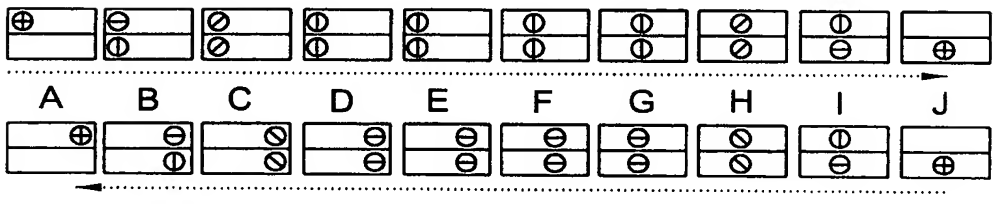


FIG. 6D

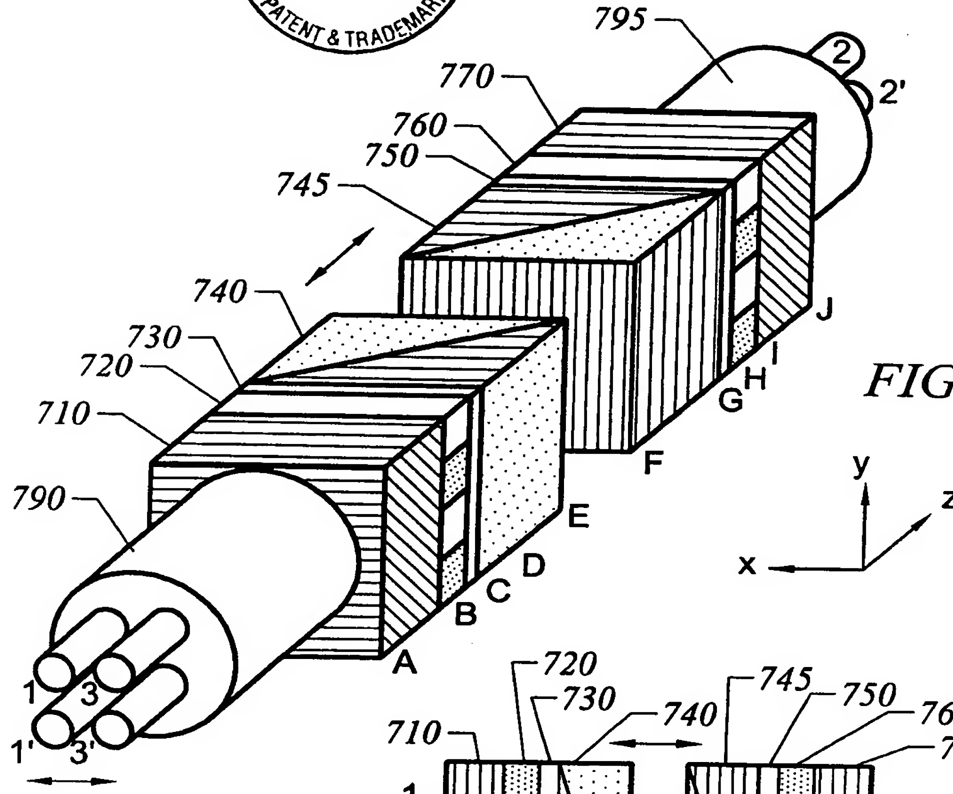


FIG. 7A

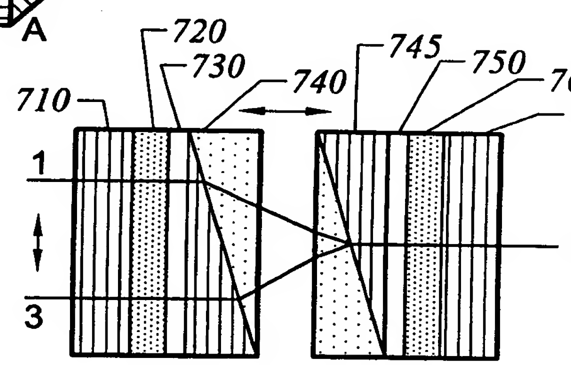


FIG. 7B

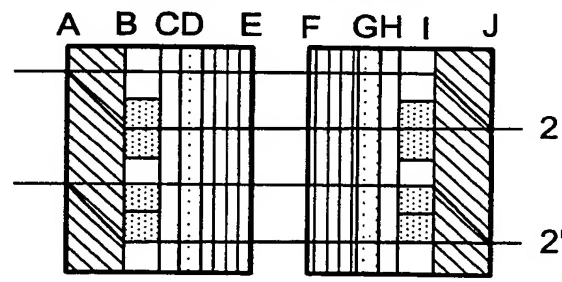


FIG. 7C

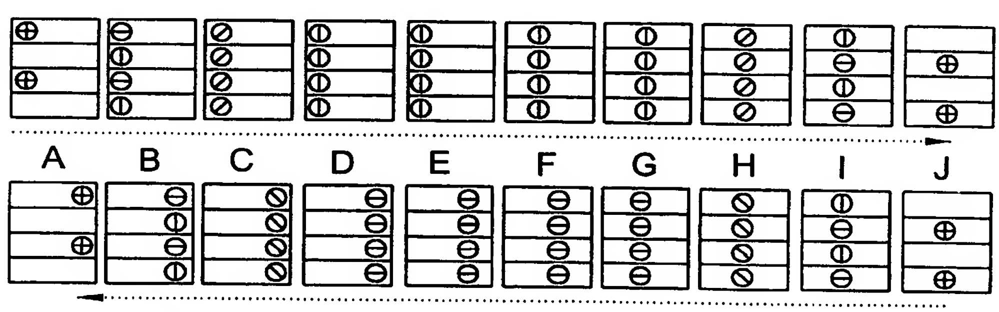


FIG. 7D

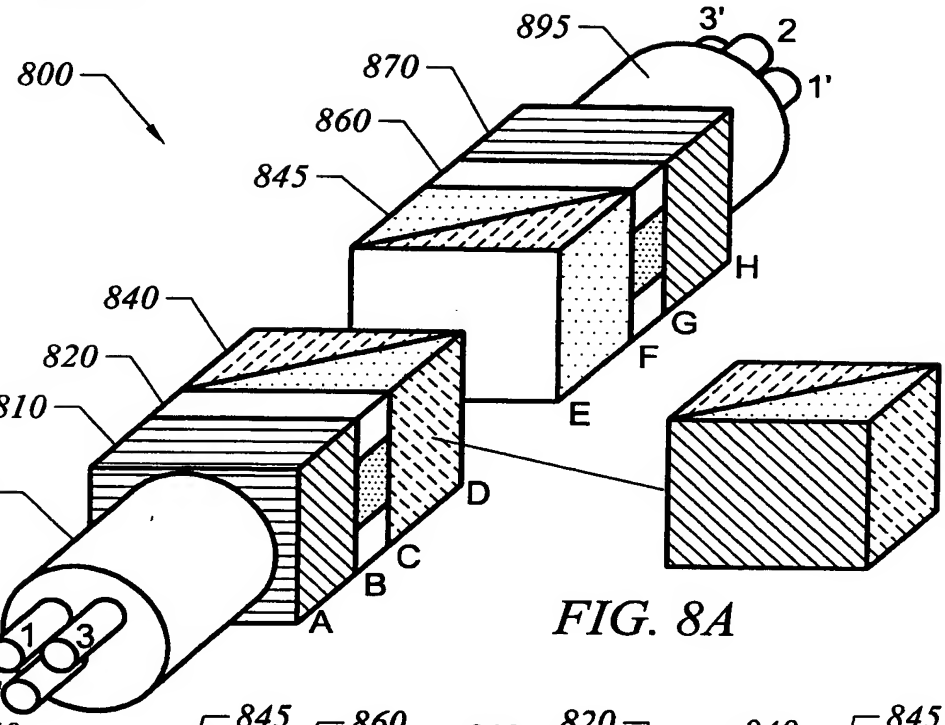


FIG. 8A

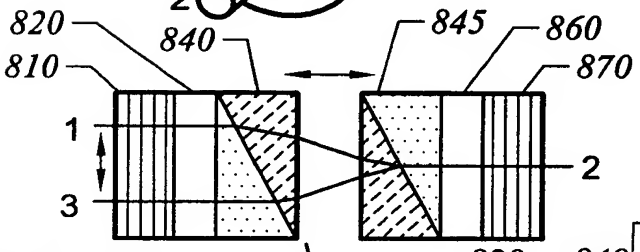


FIG. 8B

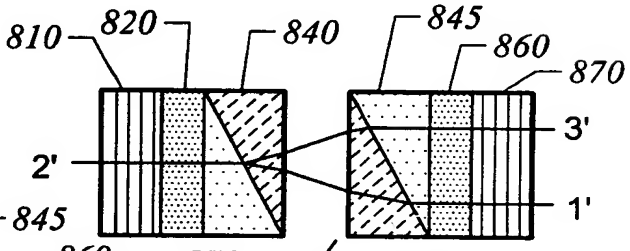


FIG. 8C

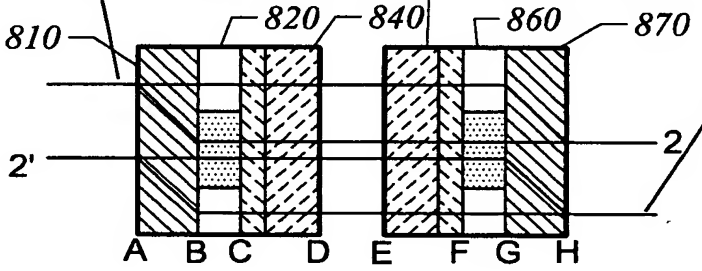


FIG. 8D

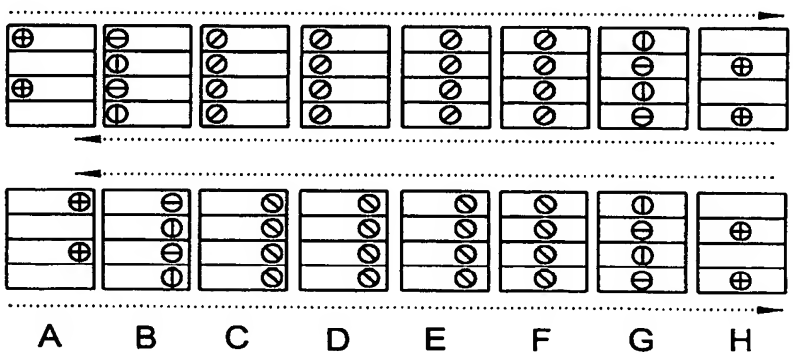


FIG. 8E

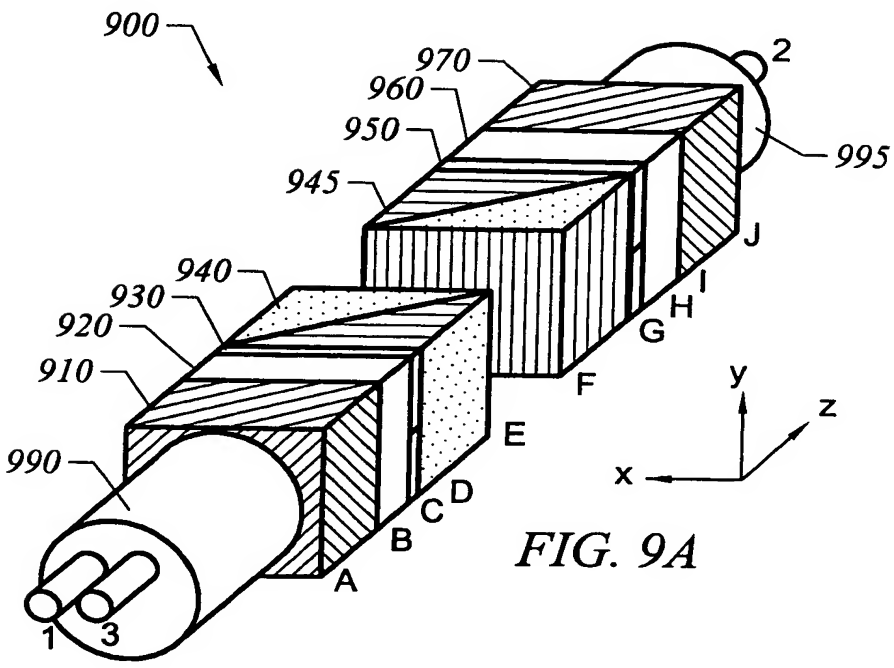


FIG. 9A

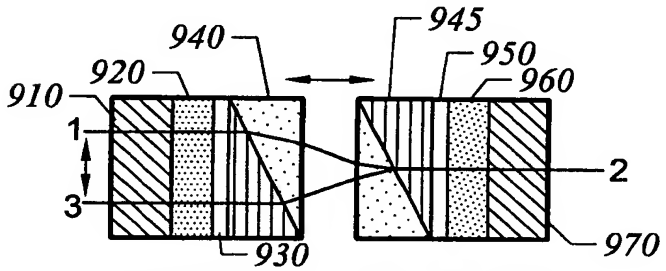


FIG. 9B

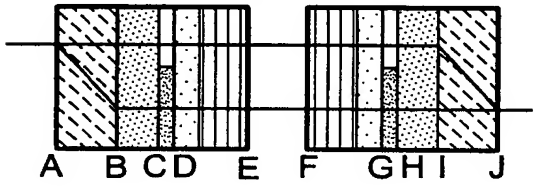


FIG. 9C

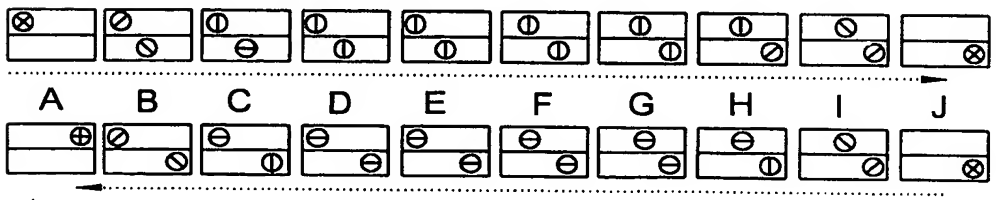


FIG. 9D

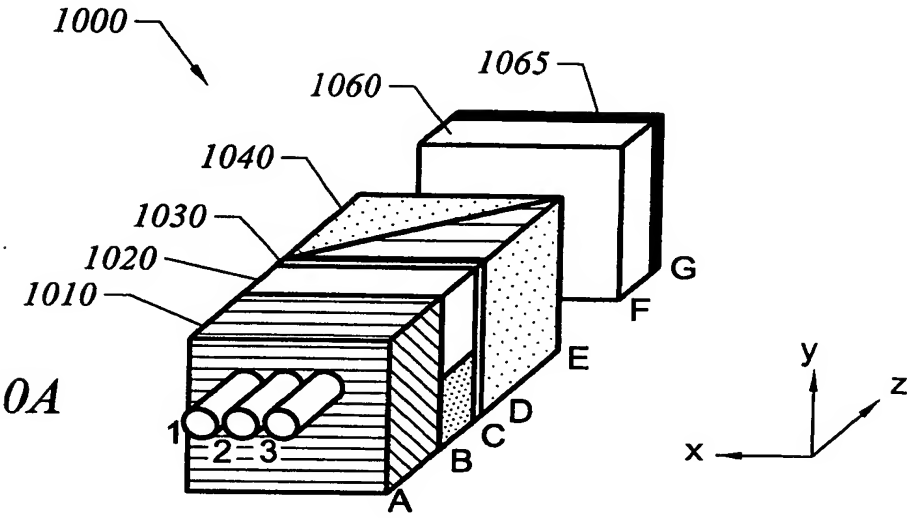


FIG. 10A

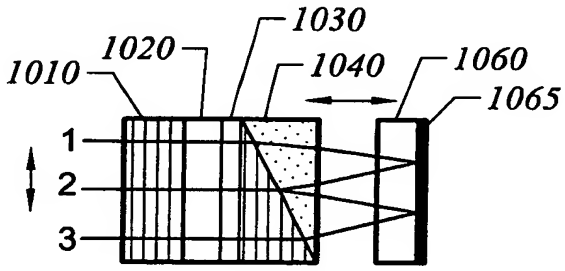


FIG. 10B

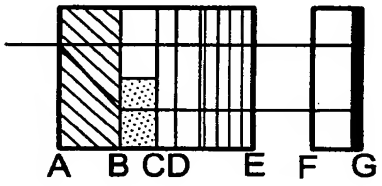


FIG. 10C

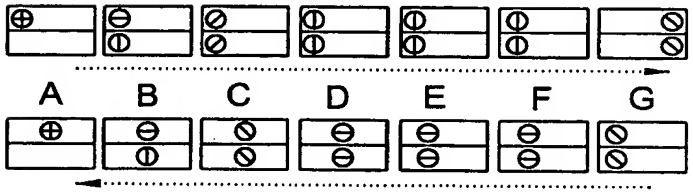


FIG. 10D

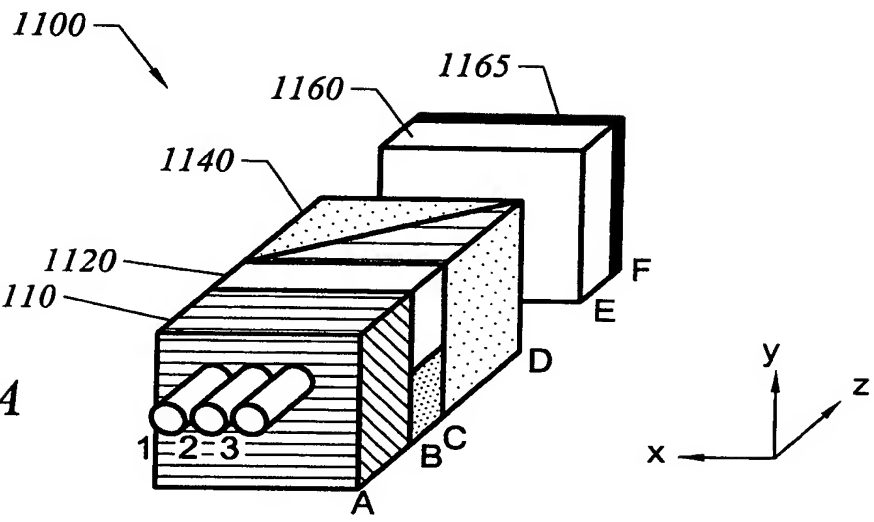


FIG. 11A

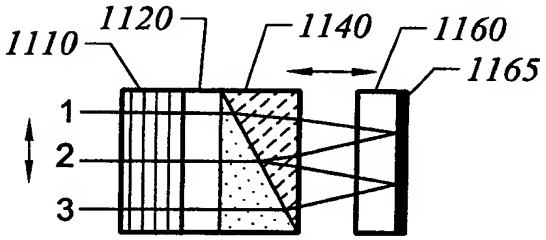


FIG. 11B

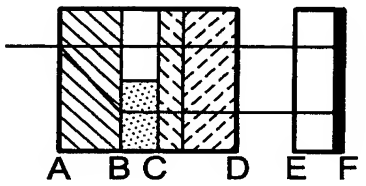


FIG. 11C

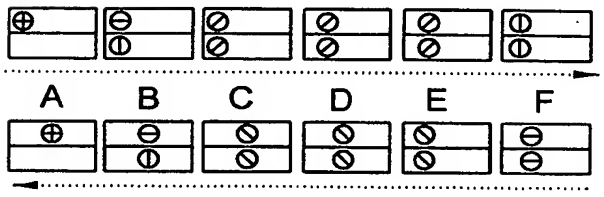


FIG. 11D

Fabrication Process of a Circulator Array

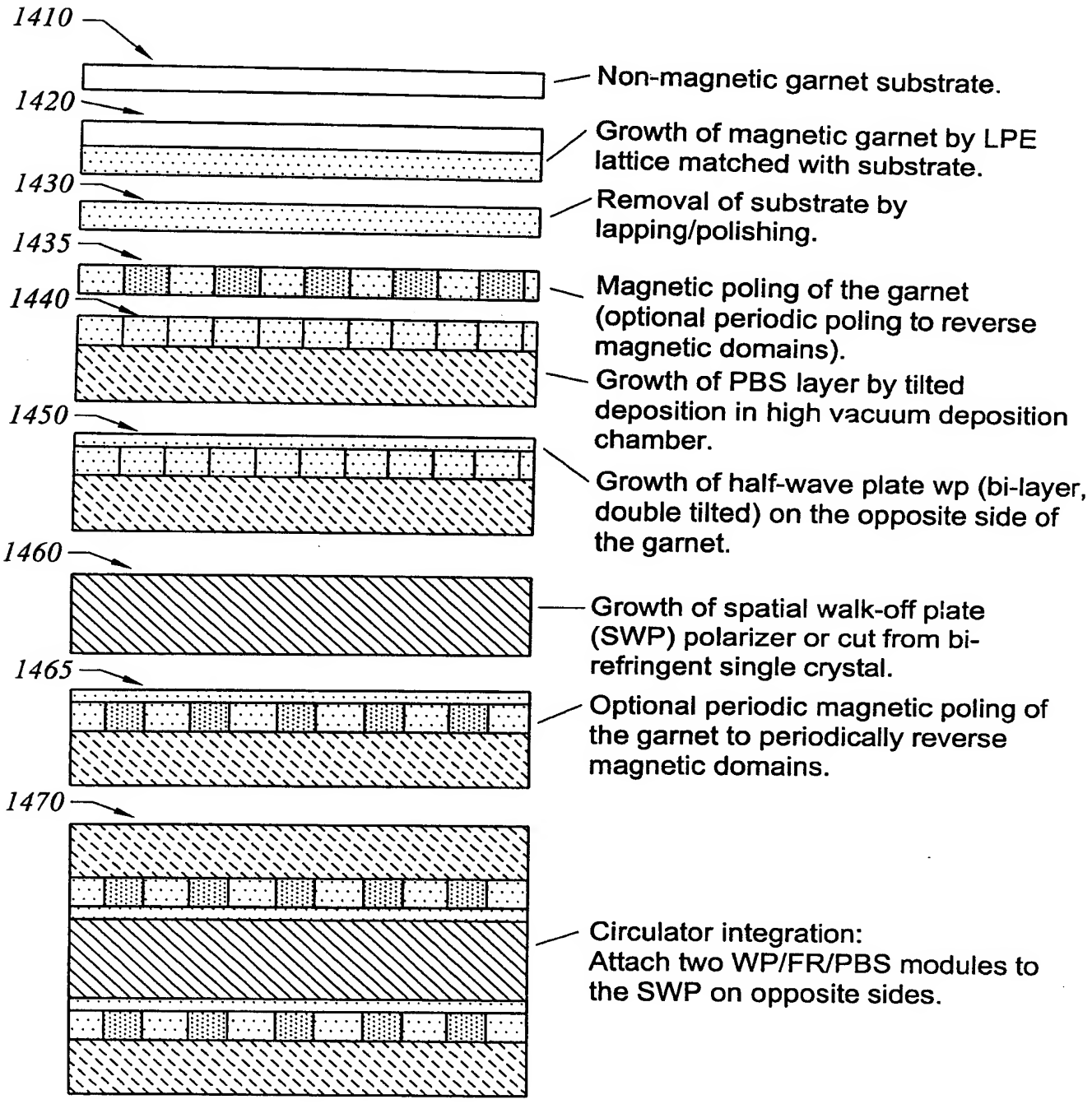


FIG. 12

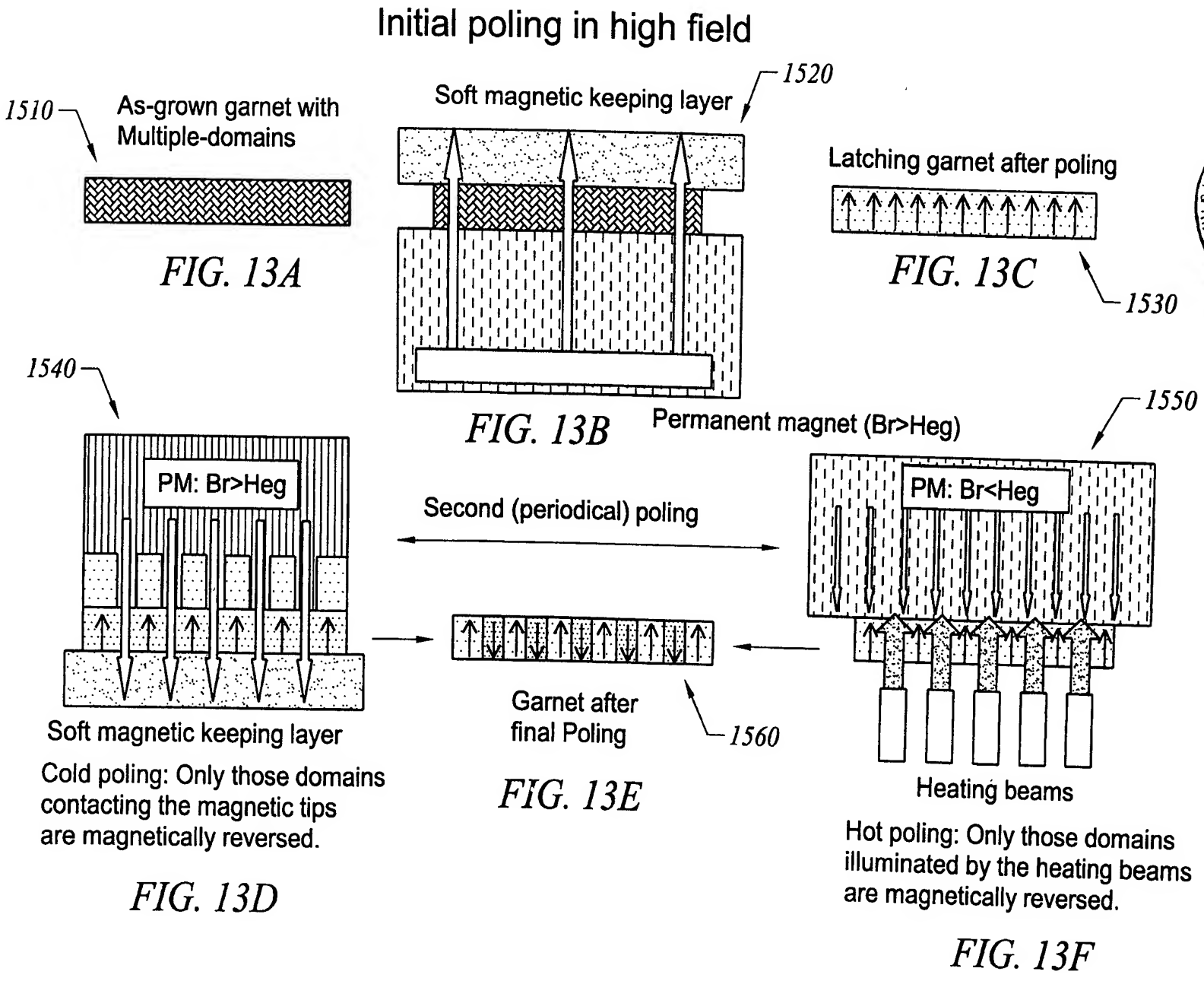


FIG. 13A

FIG. 13B

FIG. 13C

FIG. 13D

FIG. 13E

FIG. 13F

Magnetic (Periodic) Poling of Faraday Rotator

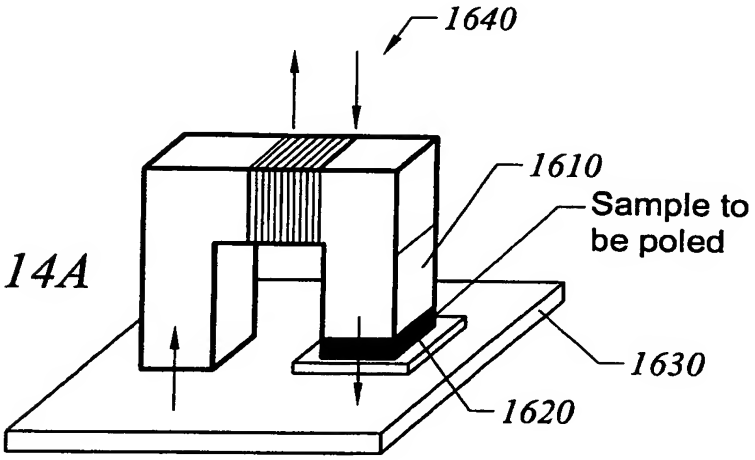


FIG. 14A

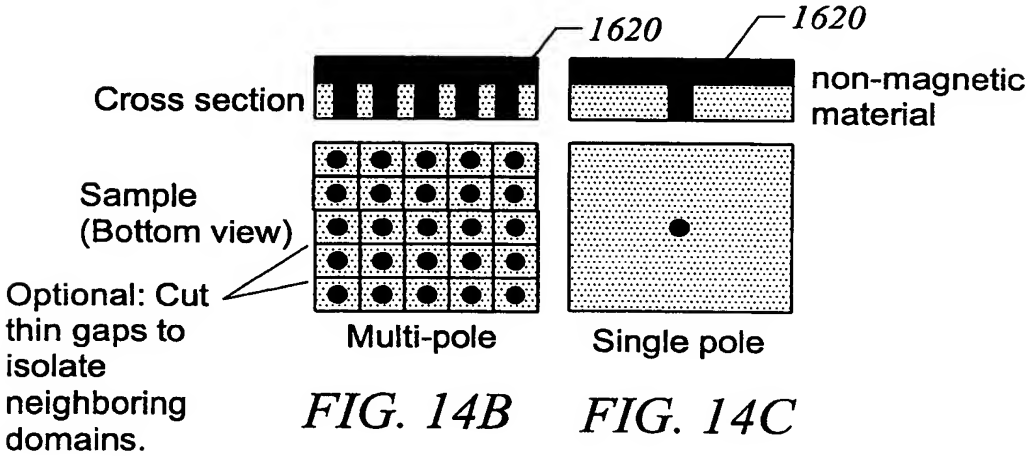
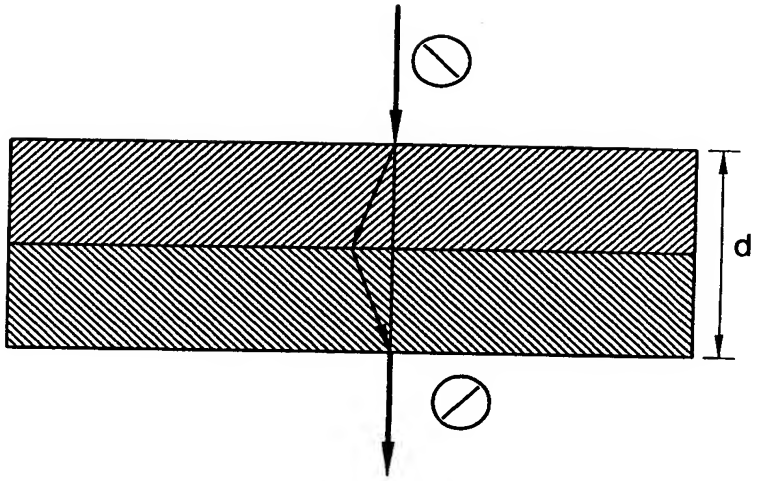


FIG. 14B

FIG. 14C



Waveplate from bi-directionally obliquely deposited films

Half wave plate : $\Delta n \cdot d = \lambda/2$

The half-wave plate is capable of rotating a linearly polarized light by 2 θ(where θ is the direction of polarization with respect to the optical axis before entering the wave plate).

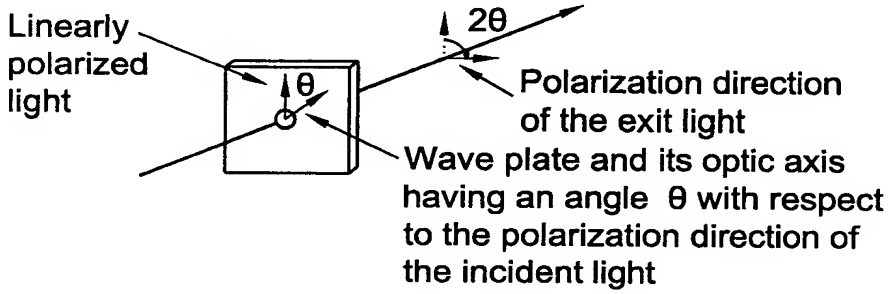


FIG. 15

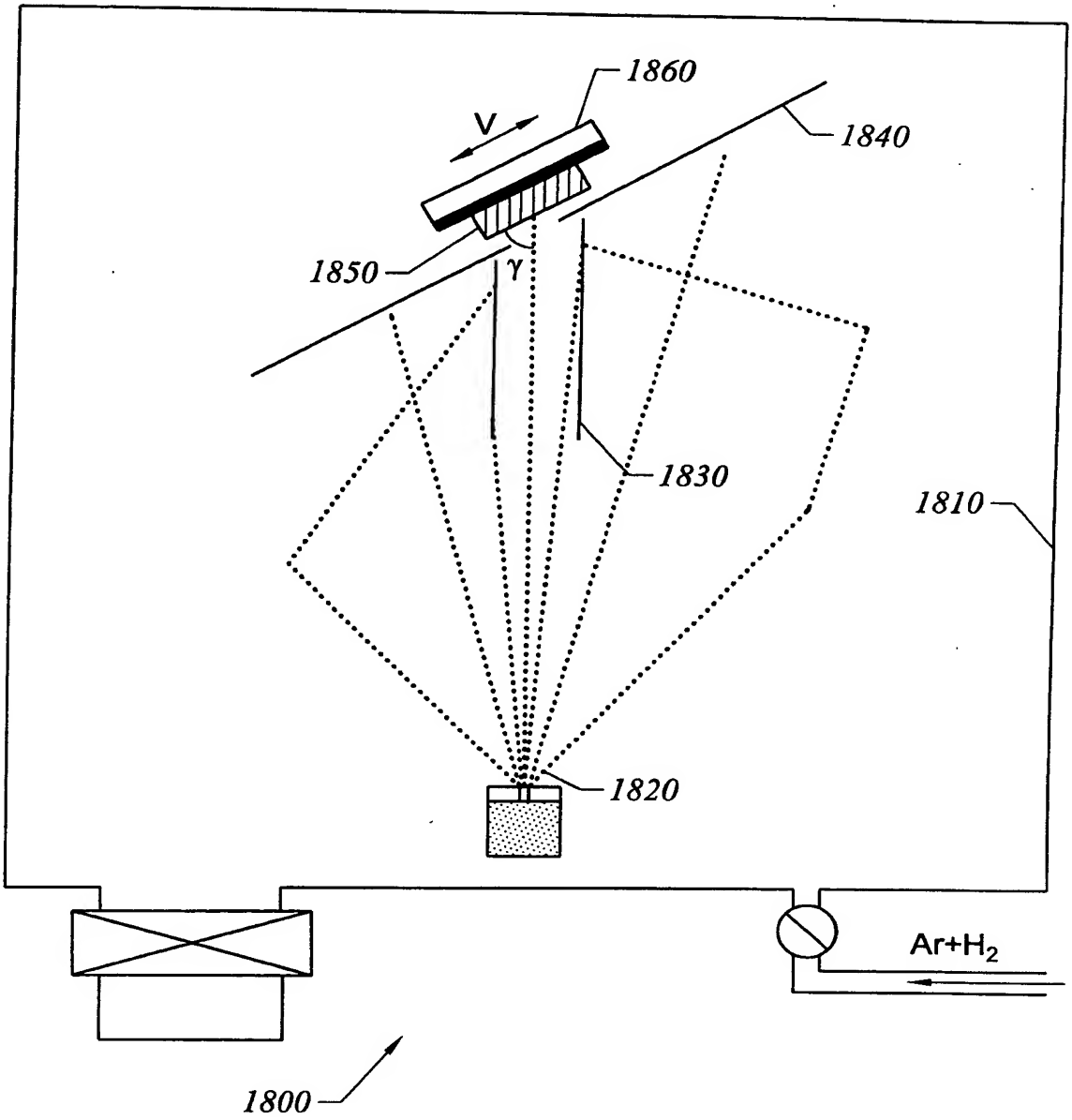


FIG. 16

Fabrication Process of a Circulator Array

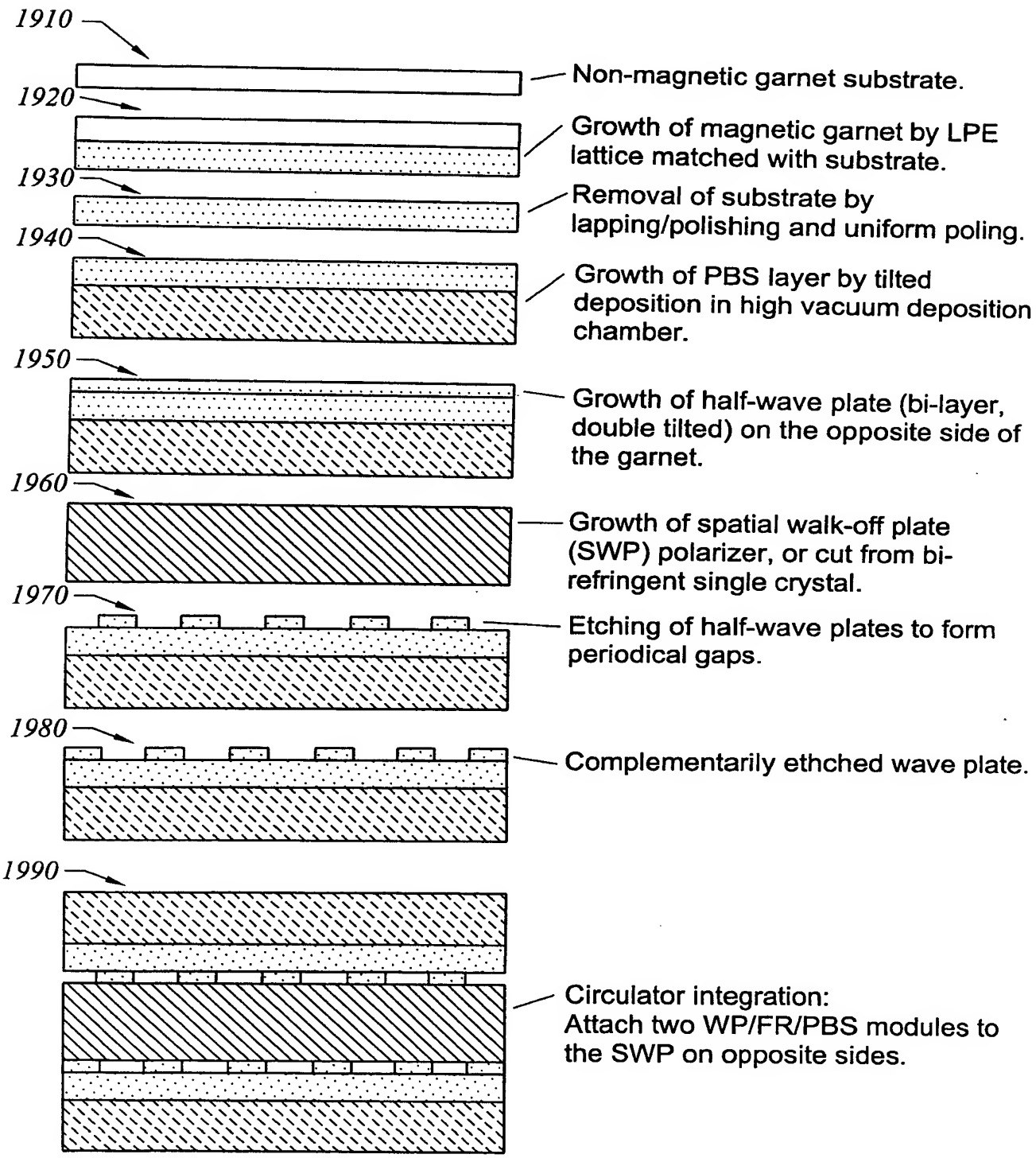


FIG. 17